

ABSTRACT

A system and method for delivering both anti-tachy pacing (ATP) therapy and high-voltage shock therapy in response to detection of abnormal cardiac rhythms is disclosed. The system controls the time between delivering ATP therapy and the charging of high-voltage capacitors in preparation for shock delivery based on a predetermined set of criteria. In one embodiment, the inventive system operates in an ATP During Capacitor Charging (ATP-DCC) mode wherein all, or substantially all, of the ATP therapy is delivered during charging of the high-voltage capacitors. Based on evaluation of the predetermined set of criteria, the system may switch to an additional ATP Before Capacitor Charging (ATP-BCC) mode, wherein substantially all of the ATP therapy is delivered prior to charging of the high-voltage capacitor. According to one aspect of the invention, the predetermined set of criteria is based, at least in part, on the effectiveness of previously-delivered ATP therapy.